

Environmental Protection Agency

Pt. 63, Subpt. IIIII, Table 2

For . . .	You must . . .
8. Submerged mercury pumps	<p>d. Prior to opening a decomposer, do the following: fill the decomposer with an aqueous liquid or drain the decomposer liquid mercury into a container that meets requirements in Table 1, Item 9 or 10, allow the decomposer to cool before opening, and complete work that can be done before opening the decomposer.</p> <p>e. Take precautions to avoid mercury spills when changing graphite grids or balls in horizontal decomposers or graphite packing in vertical decomposers. If a spill occurs, you must clean it up in accordance with the requirements in Table 3 to this subpart.</p> <p>f. After each maintenance activity, use an appropriate technique (Table 6 to this subpart) to check for hydrogen leaks.</p> <p>g. Before transporting any internal part from the decomposer (such as the graphite basket) to another work area, remove all visible mercury from the part or contain the part to prevent mercury from dripping during transport.</p> <p>h. Store carbon from decomposers in accordance with the requirements in 40 CFR part 265, subparts I and CC, until the carbon is treated or is disposed.</p> <p>a. Provide a vapor outlet connection from each submerged pump to an end box ventilation system. The connection must be maintained under negative pressure.</p> <p>b. Keep each mercury pump tank closed, except when maintenance or operation activities require the cover to be removed.</p> <p>c. Maintain a flow of aqueous liquid over the liquid mercury in each mercury pump tank and maintain the aqueous liquid at a temperature below its boiling point.</p>
9. Open-top containers holding liquid mercury.	<p>Maintain a layer of aqueous liquid over liquid mercury in each open-top container. Replenish the aqueous layer at least once per day and, when necessitated by operating procedures or observation, collect the liquid mercury from the container in accordance with the requirements in Table 4 to this subpart.</p>
10. Closed containers used to store liquid mercury.	<p>a. Store liquid mercury in containers with tight fitting covers.</p> <p>b. Maintain the seals on the covers in good condition.</p> <p>c. Keep each container securely closed when mercury is not being added to, or removed from, the container.</p>
11. Caustic systems	<p>a. Maintain the seal between each caustic basket cover and caustic basket by using gaskets and other appropriate material.</p> <p>b. Do not allow solids and liquids collected from back-flushing primary caustic filters to contact floors or run into open trenches.</p> <p>c. Collect solids and liquids from back-flushing each primary caustic filter and collect these mercury-containing wastes in process vessels or in accordance with the requirements in 40 CFR part 265, subparts I and CC.</p> <p>d. Keep each caustic basket closed and sealed, except when operation or maintenance activities require short term access.</p>
12. Hydrogen systems	<p>a. Collect drips from each hydrogen seal pot and compressor seal in containers meeting the requirements in this table for open containers. These drips should not be allowed to run on the floor or in open trenches.</p> <p>b. Minimize purging of hydrogen from a decomposer into the cell room by either sweeping the decomposer with an inert gas or by routing the hydrogen to the hydrogen system.</p> <p>c. Maintain hydrogen piping gaskets in good condition.</p> <p>d. After any maintenance activities, use an appropriate technique (Table 6 to this subpart) to check all hydrogen piping flanges that were opened for hydrogen leaks.</p>

TABLE 2 TO SUBPART IIIII OF PART 63—WORK PRACTICE STANDARDS—REQUIRED INSPECTIONS

As stated in §63.8192, you must meet the work practice standards in the following table:

You must inspect . . .	At least once each . . .	And if you find . . .	You must . . .
1. Each vent hose on each mercury cell.	Half day	A leaking vent hose	Take action immediately to correct the leak.
2. Each open-top container holding liquid mercury.	Half day	Liquid mercury that is not covered by an aqueous liquid.	Take action immediately to cover the liquid mercury with an aqueous liquid.
3. Each end box	Half day	<p>a. An end box cover not securely in place.</p> <p>b. An end box stopper not securely in place.</p> <p>c. Liquid mercury in an end box that is not covered by an aqueous liquid at a temperature below boiling.</p>	<p>Take action immediately to put the end box cover securely in place.</p> <p>Take action immediately to put the end box stopper securely in place.</p> <p>Take action immediately to cover the liquid mercury with an aqueous liquid.</p>
4. Each mercury amalgam seal pot.	Half day	A seal pot cover that is not securely in place.	Take action immediately to put the seal pot cover securely in place.

You must inspect . . .	At least once each . . .	And if you find . . .	You must . . .
5. Each mercury seal pot	Half day	A mercury seal pot stopper not securely in place.	Take action immediately to put the mercury seal pot stopper securely in place.
6. Cell room floors	Month	Cracks, spalling, or other deficiencies that could cause liquid mercury to become trapped.	Repair the crack, spalling, or other deficiency within 1 month from the time you identify the deficiency.
7. Pillars and beams	6 months	Cracks, spalling, or other deficiencies that could cause liquid mercury to become trapped.	Repair the crack, spalling, or other deficiency within 1 month from the time you identify the deficiency.
8. Each caustic basket	Half day	A caustic basket cover that is not securely in place.	Take action immediately to put the caustic basket cover securely in place.
9. All equipment and piping in the caustic system.	Day	Equipment that is leaking caustic	Initiate repair of the leaking equipment within 72 hours from the time that you identify the caustic leak.
10. All floors and other surfaces where liquid mercury could accumulate in cell rooms and other production facilities and in mercury recovery facilities.	Half day	A liquid mercury spill or accumulation.	Take the required action specified in Table 3 to this subpart.
11. Each electrolyzer bottom, electrolyzer side panel, end box, mercury amalgam seal pot, decomposer, mercury pump, and hydrogen cooler, and all other vessels, piping, and equipment in liquid mercury service in the cell room.	Day	Equipment that is leaking liquid mercury.	Take the required action specified in Table 3 to this subpart.
12. Each decomposer and all hydrogen piping up to the hydrogen header.	Half day	Equipment that is leaking hydrogen and/or mercury vapor.	Take the required action specified in Table 3 to this subpart.
13. All equipment in the hydrogen system from the start of the header to the last control device.	3 months	Equipment that is leaking hydrogen and/or mercury vapor.	Take the required action specified in Table 3 to this subpart.

TABLE 3 TO SUBPART IIII OF PART 63—WORK PRACTICE STANDARDS—REQUIRED ACTIONS FOR LIQUID MERCURY SPILLS AND ACCUMULATIONS AND HYDROGEN AND MERCURY VAPOR LEAKS

As stated in §63.8192, you must meet the work practice standards in the following table:

During a required inspection or at any other time, if you find . . .	You must . . .
1. A liquid mercury spill or accumulation.	<ul style="list-style-type: none"> a. Initiate clean up of the liquid mercury spill or accumulation as soon as possible, but no later than 1 hour from the time you detect it. b. Clean up liquid mercury using a mercury vacuum cleaner or by using an alternative method. If you use an alternative method to clean up liquid mercury, you must submit a description of the method to the Administrator in your Notification of Compliance Status report. c. If you use a mercury vacuum cleaner, the vacuum cleaner must be designed to prevent generation of airborne mercury; you must cap the ends of hoses after each use; and after vacuuming, you must wash down the area. d. Inspect all equipment in liquid mercury service in the surrounding area to identify the source of the liquid mercury within 1 hour from the time you detect the liquid mercury spill or accumulation. e. If you identify leaking equipment as the source of the spill or accumulation, contain the dripping mercury, stop the leak, and repair the leaking equipment as specified below. f. If you cannot identify the source of the liquid mercury spill or accumulation, re-inspect the area within 6 hours of the time you detected the liquid mercury spill or accumulation, or within 6 hours of the last inspection of the area.
2. Equipment that is leaking liquid mercury.	<ul style="list-style-type: none"> a. Contain the liquid mercury dripping from the leaking equipment by placing a container under the leak within 30 minutes from the time you identify the liquid mercury leak. b. The container must meet the requirement for open-top containers in Table 1 to this subpart. c. Make a first attempt at stopping the leak within 1 hour from the time you identify the liquid mercury leak. d. Stop the leak and repair the leaking equipment within 4 hours from the time you identify the liquid mercury leak.